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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,018	07/11/2005	Yoshiyuki Taniguchi	274523US0PCT	8123
22850 7590 12/13/2007 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER HAILEY, PATRICIA L	
			ART UNIT 1793	PAPER NUMBER
			NOTIFICATION DATE 12/13/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/542,018

Applicant(s)

TANIGUCHI ET AL.

Examiner

Patricia L. Hailey

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                          |

Applicants' remarks and amendments, filed on September 25, 2007, have been carefully considered. No claims have been canceled or added; claims 1-28 remain pending in this application.

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Applicants' Priority Document was filed on July 11, 2005.

***Withdrawn Rejection***

The 112(2) rejection of claim 14 stated in the previous Office Action has been withdrawn in view of Applicants' amendment thereto.

***Maintained Rejection***

The following rejection of record has been maintained; the text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 103***

2. ***Claims 1-28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Uhara et al. (U. S. Patent Application Publication No. 2003/0162997, now issued as U. S. Patent No. 7,253,309).***

Uhara et al. disclose a method for the production of methacrylic acid, said method comprising introducing a preheated gas into catalyst-packed reactors, so as to retain the relative humidity of the catalyst beds in the range of not more than 40%, and elevating the temperature of said reactors, thereby preventing the catalyst from absorbing moisture. See claim 1 of Uhara et al.

Examples of the preheated gas include air and inert gases such as carbon dioxide, nitrogen gas, and argon gas (considered to read upon **claims 9, 10, 12, and 13**). The preheated gas is elevated to a temperature ranging from 50 to 400°C (considered to read upon **claims 2, 3, and 6-8, 11** regarding the “retaining temperature”, and **claim 14** regarding the phrase “catalyst is preserved in dark ambient”). See paragraphs [0020] and [0021] of Uhara et al.

The relative humidity of the catalyst beds is varied by the water content in the preheated gas and the temperature of the catalyst beds. For the purpose of elevating the temperature of the preheated gas while keeping the relative humidity of the beds below 40 %, it is advantageous to use a preheated gas having a low water content (considered to read upon **claims 2-8 and 11** regarding the “water concentration in gas in said reactor”; further, the claim recitation “or less” in describing both the claimed water concentration and “water content of 30 mg or less per 1 g of catalyst dry weight” is also considered read upon by Uhara et al., as the phrase “or less” numerically includes the value of zero). See paragraphs [0022] and [0023] of Uhara et al.

Uhara et al. also disclose exemplary conditions of producing methacrylic acid from methacrolein via catalytic oxidation (considered to read upon **claims 15, 16, and 19-23**). See paragraphs [0024] and [0025] of Uhara et al.

In paragraphs [0017] and [0018] of Uhara et al., the reference discloses a catalyst represented by a formula strongly similar to that recited in Applicants' **claims 17, 18, and 24-28**.

Although Uhara et al. do not recite the limitation "a method for preserving a catalyst", the reference structurally reads upon Applicants' claims in their present form, in terms of Applicants' claimed catalyst, and the conditions under which said catalyst is maintained in a reactor. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect that the teachings of Uhara et al., aimed at maintaining a catalyst under conditions of relative humidity and temperature and "preventing the catalyst from absorbing moisture" (claim 1 of Uhara et al.), to read upon Applicants' claimed "method of preserving a catalyst".

### ***Response to Arguments***

In response to Applicants' arguments that Uhara et al. do not teach or suggest the claimed invention, but rather is more comparable to the comparative examples in the present application, the Examiner respectfully submits that Applicants are relying on features not presently recited in the claims to refute the teachings of Uhara et al. It is the claims that define the claimed invention, and it is claims, not specifications, that are

anticipated or unpatentable. Constant v. Advanced Micro-Devices, Inc., 7 U.S.P.Q. 2d 1064.

Further, with respect to the claimed "condition of a water content of 30 mg or less per 1 g of catalyst dry weight", Uhara et al. is considered to meet this limitation, as the phrase "or less" includes the value of zero (0).

Lastly, Applicants argue that Uhara et al. minimize deterioration of the catalyst during start-up (page 12 of Applicants' remarks, 2<sup>nd</sup> paragraph), and additionally state that the claimed invention, a catalyst preserving method, prevents deterioration of the catalyst (page 12 of Applicants' remarks, 3<sup>rd</sup> paragraph). It appears, then, that Uhara et al. *do* teach and suggest the claimed invention.

For these reasons, Applicants' arguments are not persuasive, and the rejection of record is maintained.

### ***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Fridays, from 7:00 a.m. to 3:30 p.m.

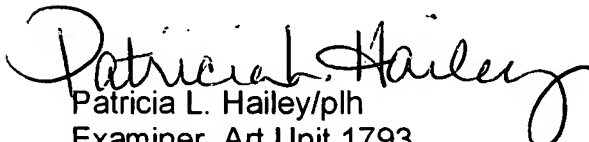
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Patricia L. Hailey/plh  
Examiner, Art Unit 1793  
December 3, 2007

  
J. A. LORENGO  
SUPERVISORY PATENT EXAMINER